STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION

IN RE: TARIFF ADVICE FILING FOR CUSTOMER-OWNED STREET & AREA LIGHTING PROPOSAL	)	DOCKET NO. 4442

THE RHODE ISLAND LEAGUE OF CITIES AND TOWNS
AND
THE WASHINGTON COUNTY REGIONAL PLANNING COUNCILS'
MEMORANDUM OF LAW

By its attorneys, the Rhode Island League of Cities and Towns (the League) and the Washington County Regional Planning Counsel (WCRPC) (collectively, the "Municipalities") submit this memorandum of law commenting on the Tariff Advice Filing for Customer-Owned Street and Area Lighting Proposal. National Grid's filing raises significant concerns for the Towns regarding the purchase terms and the rates, charges and terms for ongoing service and too often appears to be designed to discourage municipal participation in the program.

The intent of the Municipal Streetlights Investment Act (Act) is spelled out clearly in its Findings and Purpose section:

> (b) Now, therefore, the purpose of this chapter is to reduce municipal street lighting costs and improve service to citizens by:
> (1) Improving public safety with street lights that provide better illumination;
> (2) Reducing maintenance costs by allowing municipalities to own the street and area lighting within their borders and to enter into regional maintenance service contracts;
> (3) Reducing whole-system cost through municipal ownership and regional management and by eliminating the current "facilities charge;"
> (4) Providing innovative and proven technologies for more efficient lighting; and
> (5) Providing more responsive service for lighting repairs.

In some ways the proposed tariff is inconsistent with the express language of the Act. In other ways, the tariff is contrary to the Act's intent.

I. Purchase & Operating Terms

a. PUC review of Proposed Purchase and License Agreements

It is critically important that the Public Utilities Commission (PUC) review and resolve concerns about the proposed terms of the Municipalities' purchase and operation of the lighting equipment, including National Grid's proposed purchase and license agreements, as part of this proceeding. The proposed tariff and National Grid's own testimony indicate how important the sale and licensing agreements are to the implementation of this program. Sheet 1 of the draft tariff reads:

> Service under this rate is contingent upon the execution of a written purchase and sale agreement for the Company's designated street and area lighting facilities, and dedicated poles, standards or accessories, the completed transfer of title to the facilities from the Company to the Customer, and the execution of and compliance with associated license agreements between the Customer and the Company.

At page 12 of her testimony, Ms. Lloyd is asked the following question:

> **Will there be a document which governs the rights and responsibilities of the customer and the Company pertaining to customer-owned streetlighting?**

She replies:

> A. Yes. In addition to the proposed Rate S-05 tariff, the Company will require the customer to execute a license agreement that identifies, in greater detail, the rights and responsibilities associated with service under the Rate S-05 tariff.

At page 18 of his testimony, Mr. Walter states "Additionally, other charges contained within the License Agreements may be applicable to customers requesting additional lights or relocation of existing lights" including a "Field Survey Charge" and "Make Ready Charges." Then again, on page 20 of his testimony, Mr. Walter discusses "Issues Related to Customer Purchase of Lighting Assets" by stating that "The Company will require the customer to execute a License Agreement which will address the roles and responsibilities of both parties relative to the identified issues" adding that "it is

imperative for the customer to comply with all terms and conditions of the License Agreements." There can be no question that both the proposed purchase and sale and licensing agreements contain terms essential to the municipality's purchase and operation of streetlights as contemplated in the Act.

The agreements contain significant charges and cost implications to the Municipalities that are not otherwise addressed in the filed tariff. If the PUC agrees with National Grid's positions that these agreements are not relevant to this proceeding, National Grid should be ordered to remove any such charges or costs from the agreements and propose a new tariff directly addressing those charges and costs. The Municipalities would then need to immediately initiate a separate proceeding in another venue to address their other concerns with the terms of the agreements.

The Office of Energy Resources (OER), when consulted in the development of the tariff, asked that these agreements be included in the tariff filing. National Grid responded:

> The proposed S-05 Tariff is a contractual document that will govern the Company's provision and billing of electric service to customers who own their street lighting equipment and receive service under the S-05 Tariff. The Agreements are separate contractual documents that, while related to the S-05 Tariff, are separate legal documents. Moreover, the Act does not require the Company to incorporate the Agreements into the S-05 Tariff for the Commission's approval.

However, it is clear that the proposed S-05 Tariff is not the only contractual document that governs the Company's provision of electric service to municipalities that seek to purchase and operate their streetlights. Among other things, the agreements impose significant charges and costs on the Municipalities that are not otherwise addressed in the filed tariff and would properly be addressed in a tariff. Second, the Act did not contemplate these separate agreements that were first proposed by National Grid in its tariff filing, so the fact that the Act did not require their production is immaterial. These agreements are integral to the implementation of the Act and therefore should be reviewed and resolved by the PUC.

b. The Proposed Terms of Transfer

There are three categories of concerns with regard to the terms under which National Grid proposes to transfer streetlights pursuant to the Act and tariff: what is being purchased, the price for the purchase, and the terms of the purchase and license agreements. We will address the first two issues together and then address the third separately.

i. Defining the "lighting equipment" to be purchased and the price.

The Act states that any municipality resolved to purchase its streetlights must "compensate the electric distribution company for the original cost, less depreciation and less amortization of any active or inactive existing public lighting equipment owned by the electric distribution company and installed in the municipality as of the date the municipality exercises its right of acquisition pursuant to subsection (a), net of any salvage value." R.I. Gen. Laws §39-29-3(b). Municipalities deliberating whether to purchase their streetlight systems must have access to all information that National Grid has about the systems since this information is used to calculate the purchase price. Such information must include at least the number of lights, the type and wattage of lights, when the lights and/or other equipment were placed in service, what the original cost of the equipment is, what its depreciation status is, status of any existing warranties, and the nature of any other assets proposed to be sold in association with the lights.

On page 9 of her testimony, Ms. Lloyd states that:

> the Company will identify the inventory to be purchased by the customer either through examination of current billing system records or by conducting a field investigation, if necessary. Next, the Company will calculate the sale prices of the assets that the customer will be purchasing and execute an agreement of sale and license agreement.

She also states that. . .

> they would also be required to purchase any dedicated poles (and related foundations) upon which the only attached equipment is a street light, conductor (wire) installed exclusively for providing streetlighting service, and underground streetlighting equipment, such as conductor

> and conduit. Generally, anything that the Company would be required to record in plant unit account ("PUC") 373 in compliance with the uniform system of accounts contained in the Code of Federal Regulations issued by the Federal Energy Regulatory Commission would be subject to purchase.

Two things are clear from Ms. Lloyd's testimony. First, municipalities have no way to know what they are buying unless National Grid clearly discloses its complete inventory. National Grid performs the inventory needed to identify the "lighting equipment" to be purchased without input or transparency to the Municipalities. Second, National Grid apparently intended to set its own sale price for these assets without allowing the municipalities access to the information upon which the proposed price is based. That approach clearly stacks the deck against the municipalities as they seek to negotiate a fair and reasonable purchase price. The production of a clear and coherent inventory is critically important to the success of this program.

In its consultation with National Grid, OER noted that:

> The draft tariff requires the municipality to maintain and report to the Company an inventory of the lighting equipment. But this inventory must originally come from the Company as part of the purchase to a municipality. The Act requires the purchase price to be calculated from the "original cost less depreciation..." so this information must be included in the initial inventory presented to the municipality by the Company.

National Grid responded:

> The Company provides an inventory report of actively billed lighting facilities to all unmetered lighting service customers upon request. This inventory report includes the billable components such as a luminaire or non-distribution pole in an Excel spreadsheet format and is extracted from the Company's Customer Service System used for billing purposes. Each location is assigned a unique identifying sequence based on the physical location and its designated labeling format. The Company will provide S-05 Tariff customers with a similar inventory report as part of their purchase of street lighting equipment.

National Grid's response is deficient because the inventory report it proposes for production does not include all information necessary to check the accuracy of the price calculation, including, for example, the date any lighting equipment was put in service. Now is the time for the PUC to ensure

the foundation for a transparent and equitable purchase price negotiation. This request is eminently fair and reasonable since ratepayer funds were used to pay for the streetlights National Grid is now selling to our municipalities.

National Grid has presented substantial information about its inventory and price calculation in response to RI League & WCRPC 1-1 and PUC 1-7, but that information remains incomplete and incoherent. (See Prefiled Testimony of Dan Carrigg "Carrigg," attached as Exhibit A, page 8, line 22) The Act requires using the original price less depreciation to calculate price, and in its price calculations National Grid does use those parameters. (Id.) However, the listed equipment is highly generalized, such as "all brackets put into service in each year," each municipality has one listing, and the quantity of items in the listing is not specified. (Id.) This is convenient for National Grid and may, indeed, provide an accurate way for them to price the streetlight system. (Id.) However, there is no way for the municipal customer to verify the price proposed by the Company either by comparing it to the inventory or by their own, expensive field survey. (Id.) In addition, the information is provided in pdf form and, therefore, is not portable for analysis. (Id.)

National Grid has provided an inventory separately from the pricing mechanism, in Excel form. (Id.) It was received too late for the Municipalities to check it against all of the towns' data. (Id.) The inventory contains the location and identification information requested, but cannot be tied to the pricing information to verify prices. (Id.) The Municipalities looked at two small towns to try to match the data sets. (Id.) For Exeter, the price schedule says the Town must pay $195 for its streetlight system and the detail has 40 entries by year, indicating an unknown number of lights. (Id.) The inventory shows 14 entries, indicating seven streetlights. (Id.) Yet the Town of Exeter claims to pay no streetlight invoices to National Grid. (Id.)

For the town of Richmond, the Inventory shows only four entries. (Id.) Two are "turned off permanent" lamps—one a luminaire and one a 250 W HPS streetlight lamp - and these have the same geocode location, so it is reasonable to assume they are one streetlight that the town has requested be turned off permanently. (Id.) The other two have no geocodes so cannot be located, are labeled "active," and since one is a lamp and one a luminaire and they are on the same pole, one could reasonably conclude they are one light. (Id.) The "Grouped City or Town" for these two items is "Richmond," but the "Tax Area Name-City, Town, Village, District" is labeled "S KENYON T CHARLESTOWN," which suggests they are in Charlestown. (Id.) These are the only inventory listings for Richmond. (Id.)

The Pricing information for Richmond tells a different story. (Id.) It includes fifty-four separate entries, with varying "sum of values" for each. (Id.) One bracket entry has a sum of values of $7,127.12, while the bracket entry for the following year is only $467.40. (Id.) This indicates a different number of brackets, but that cannot be confirmed from the information provided. (Id.)

The inventory and pricing information is confused and confusing. Its lack of clarity puts the Municipalities at a clear disadvantage as they seek to reach a fair price for the lighting equipment. National Grid must provide much greater clarity on the inventory and price calculation to properly serve the Act's intent.

ii. Terms of the Proposed Sale and License Agreements

As a general matter these agreements are much more complex and onerous for the Municipalities than they need to be or should be in order to be fair and serve the purpose of the Act. The ninety three pages of proposed agreements impose legal burden, complexity, obligations and liabilities on the Municipalities that will probably require engagement of outside counsel and expertise at substantial cost and will simply discourage the municipalities from participation, thereby

impeding the Act's goals of reducing municipal street lighting costs and improving service to citizens. We counter-propose a unified and much simplified form of Sale and Licensing Agreement attached as Exhibit B.

In the alternative, we outline more specific concerns below:

1. Inventory: The Agreement of Sale National Grid produced in response to RI League & WCRPC data request 1-4 ("Sale Agreement"), indicates that the purchasing, municipal customer is solely accountable for an inventory of the lights National Grid currently owns and operates (page 1-2, §3). This is unreasonable given National Grid's control of the information. National Grid lacks faith in its own maps of the lighting equipment that has been under its control (see Sale Agreement page 2, §5) – it is unreasonable to propose shifting the obligation and liability for an accurate inventory to the Municipalities. As stated above, National Grid's production of a complete and coherent inventory is the starting place for a successful implementation of the Act's objectives.

2. Easements, approvals and warranties: The proposed purchase and licensing agreements indicate National Grid's refusal to assign attachment rights, easements and regulatory approvals necessary for continued operation of the lights on the poles, much to the detriment of municipal program implementation. (Sale Agreement, page 6, §10; proposed License Agreement for Overhead Electrical Service ("Overhead License") page 6, §2.4 and page 21, §15.1; License Agreement for Underground Electrical Service ("Underground License") page 10, §6.1). When asked why the assignment of existing rights is not possible, National Grid replied:

> The Company will not pursue the transferability or assignment of existing easements, property rights agreements, or other authorizations associated with street lighting equipment acquired by the customer. The administrative costs to perform the searches and negotiate individual transfers of each agreement are unrecoverable and provide no benefit to the Company.

Reply to RI League & WCRPC 2-5. When asked more generally about the assignment of attachment rights, National Grid responds, "In the event that another entity has an ownership share in the asset or

structure needed for the customer's street light attachment, the customer must obtain any necessary attachment rights and privileges directly from that entity." Id. at 2-14. It remains unclear why National Grid cannot simply assign any and all of its existing easements and attachment rights. Without additional information, the Municipalities do not even know which specific rights they will have to obtain and therefore cannot fully evaluate whether the lighting equipment is a wise investment.

NSTAR Electric's Purchase Agreement for municipal streetlights in its service area in Massachusetts provides that NSTAR Electric will "assign to the City any easement, license or other grant of location associated with said pole, to the extent allowed by such agreements (Prefiled Testimony of George Woodbury "Woodbury," attached as Exhibit C, at page 13, line 4). In addition, if NSTAR Electric has an agreement with any entity to use space on any dedicated streetlight pole that will be acquired by the City, NSTAR Electric shall, to the extent allowed by such agreement, assign to the City any such agreement" (Id.). The proposed Purchase Agreement for Rhode Island should include such a provision rather than requiring the municipal customers to reestablish any such agreements or approvals.

In response to Division 1-16, National Grid states, "The customer is responsible for obtaining warranty information from the respective manufacturers specific to the lighting equipment customers acquire from the Company." It is counterproductive and inconsistent with the Act's intent for National Grid to refuse to assign warranties on existing equipment.

3. Labeling: The labeling requirement proposed on page 4, §IV(1) and (2) of the Agreement of Sale is unclear given the vague definition of "Facilities." The Overhead License requires labeling of all "attachments" (page 9, §5.5), which is overly burdensome. Tagging is logical when a community purchases only a portion of the streetlights in its area, but should not be required when, like in Rhode

Island, a municipality must either purchase all or none of the lighting equipment. (Id. at page 11, Line 8) Tagging is used so residents can report outrages to the proper authority. (Id.) Tagging is not needed for streetlight maintenance or electric distribution system maintenance, because those workers have adequate knowledge and instructions in their work orders. (Id.) National Grid has used a red oval shaped tag on the underside of the fixture and adjacent to the lamp tag to indicate customer owned lights in a number of their Massachusetts towns. (Id.) This practice dates back to 1995 in towns such as Ware or Chelmsford, where only a portion of the lights were customer owned. (Id.) Communities should not be tasked with more extensive tagging than is currently demonstrated in National Grid's own practices in towns where there is a division of ownership. (Id.) Tagging should be limited to the minimum necessary for outage reporting. (Id.) No such tagging should be required when a community acquires the entire system. (Id.) The community should simply provide notice to its citizens of the change of ownership and to whom an outage should be reported and provide the same information to National Grid so that the utility's call center can relay correct contact information to any callers. (Id.)

Page 18, line 22 of Mr. Walter's testimony refers to the company observing: "industry standard labeling" for the purposes of random field auditing of luminaires. It would appear that Mr. Walter is referring to standard 3" NEMA label stickers that indicate light source by color and wattage by number (Carrigg at page 8, line 11, Figure 5). NEMA label stickers should be sufficient for identification of luminaires, and no additional labeling should be required. Inventory purchased from the Company should already bear standard NEMA labels that confirm light type and wattage at the time of purchase (Id. at line 15). Municipalities should not be penalized for failing to affix industry-standard labels on active property purchased from the Company in the case that such labels were not previously affixed per industry standards.

3. National Grid work: The Agreement of Sale requires National Grid presence at the customer owned premises with associated charges if a customer proposes connections or disconnections to/from National Grid's electric distribution system (page 5-6, §§IV(6),(8)). Mr. Walter's pre-filed testimony states that "until the customer has installed a fuse device, it will be necessary for the Company to disconnect (or de-energize) the customer's light from the Company's distribution system in order to perform work safely" (Walter, page 21) and that a "Lighting Service Charge" will be assessed "when energizing, re-energizing or de-energizing the customer's street and area lighting equipment." (Walter, page 18).

The costs of this requirement is excessive. (Carrigg at page 7, line 11) The installation of fuses on each and every light will be expensive. (Id.) John E. Walter describes the Company charging two separate lighting services fees for each required fuse installation. (Walter page 21, line 15) The requirement that municipalities pay both a $130 de-energize lighting services fee and a $130 re-energize lighting services fee each time it performs routine maintenance before a fuse is installed is also prohibitive. At this rate, compliance can be anticipated to cost well over twenty million dollars while the net book value of the purchased street lighting plant would be seven million dollars statewide. (Id.) This cost figure does not account for expenses related to the requirement for "immediate" removal of company property tags and affixing of municipal property tags, which would take significant time to perform on thousands of lights. (Id.) Of course safety is a paramount concern. However, the proposed charges of tens of millions of dollars in fees for upgrades and tagging is not necessary to ensure the safety of qualified personnel performing routine maintenance.

Thousands of municipalities operate municipal power companies safely and successfully. (Woodbury at page 8, line 10) A municipal owned streetlighting system is in fact a small subset of a municipal power company. (Id.) The License Agreement requires that streetlights be fused. This is

not a standard utility practice and should not be required. (Id.) It is standard utility practice to add line fuses, remove and reinstall fixtures on mast arms, replace ballasts and other lighting fixture components without de-energizing the circuit (Id.). National Grid evidently claims that fusing provides a demarcation between company-owned equipment and that fusing is for safety. The proposed Sales Agreement clearly states that "the point of ownership demarcation shall be deemed to be the existing connection point where the applicable street light Facility is energized from the electric distribution system (Connection Point)." This connection point is easily identified and understood by anyone who would be qualified to work on streetlights. (Id.) In Massachusetts over 100,000 streetlights without fuses are maintained by either contractors or municipal employees in twenty four towns, and our experts are not aware of any lack of understanding of this point of demarcation. (Id.)

National Grid's second alleged concern is safety. If this were a safety issue, why has not National Grid implemented it for the safety of its own employees? Fusing is not a standard practice and should not be imposed on communities. (Id.) The utility should not be allowed to impose non-standard practices on municipalities or create artificial requirements for no apparent purpose other than generating fees for themselves and discouraging municipal participation in the program. (Id.)

The Overhead License requires that National Grid conduct a "Field Survey" and potentially conduct "Make Ready" work every time it proposes to make a "material change" to its attachment. (Overhead License page 7, §4.1; repeated page 11, §8.2). National Grid has very broadly defined Material Change to require make ready work when none is necessary, imposing unwarranted fees. (Woodbury at page 9, line 8) Make Ready work should be limited to any alteration of the streetlight that will increase the load on the joint use pole or adversely affect the distribution system, such as introducing an increase in harmonics above the level typical of the current street lighting that would

be harmful to the distribution system, or the use of a fixture or device with lower power factor than the current utility owned streetlights. (Id.) If a community chose to install an LED light that was lighter or equal in weight and presented a equal or lower cross sectional wind area, provided for the same or less harmonics and the same or better power factor then it should be viewed as an "in kind" replacement. (Id.) The only requirement for in kind replacements should be notification of any change in wattage and fixture type that may impact rates. (Id.) Any LED fixture that meets Design Lights Consortium (DLC) criteria for certification would meet these "in kind" conditions, per the standard adopted in other states. (Id.) These proposed charges for "material changes" are completely unnecessary and are not in accordance with either National Grid's internal practices, industry practice or the practice of communities that previously purchased their systems from National Grid. (Id.) The utility is not allowed to dictate to other customers what types of refrigerators they can use or the types of equipment used in a manufacturing plant. (Id.) Streetlights should be treated the same.

The Licenses require the Municipalities to pay for work done to accommodate changes proposed by National Grid or other pole or conduit occupants (Overhead License page 13, §8.7(a); Underground License page 8,12-13, §§5.2, 8.3, 8.5, 8.6). As stated above, the municipal customer is also required to pay for any and all costs arising out of any of its own proposed changes impacting a pole or conduit or its other occupants (Overhead License page 11, §8.2; Underground License page 12, §8.4). This is clearly inequitable. National Grid's response to RI League & WCRPC 2-18 is:

> If the customer owns an existing attachment and is required to modify and/or relocate the attachment as a result of another third-party attacher's need for a modification, the customer is responsible for recovering the costs it has incurred from the third- party attacher who proposed the new attachment. The Company neither bills nor collects money for services between third-party attachers.

If National Grid is not involved in these third party negotiations, its license should not dictate or address such terms.

4. Pole and infrastructure access: The Overhead License states that National Grid may remove poles no longer of service to National Grid even if they are still of value to the municipal customers (page 5-6, §2.3). This provision is clearly unreasonable, especially given the fact that ratepayers funded the construction of the poles and they would still be serving public streetlights, and appears to be designed to discourage municipal participation in the program.

The Underground License prohibits the municipal customer's use of existing duct lines for newly installed service (page 9, §5.6). This prohibition puts an unnecessary burden (financial and otherwise) on the municipal customers. This seems to serve no purpose other than discouraging municipal participation in the program.

5. Additional and ongoing licensing requirements: The Overhead License requires that the customer apply for a license for any material change to any attachment to the pole (page 10, §7.2). This is an unreasonable requirement for the reasons discussed fully in concern number 3 above. To the extent that any authorization or licensing is required for such activity, the existing license should be sufficient to authorize such activity without having to request and negotiate a new license. Any proposed additional fixtures, once authorized by National Grid, should automatically and simply be added to the existing license agreement.

The Underground License requires a new and different license for changes to existing connections or requests for new connection points (page 10, §5.9). The existing license should be sufficient to authorize such activity without having to request and negotiate a new license.

The Overhead License allows National Grid to terminate the license at will (page 22, section 18.2) and then requires the Municipality to pay for the removal of its attachments from the pole. This is unfair and inappropriate. National Grid should not be allowed to terminate a license at its own convenience. (Woodbury at page 12, line 11) As one example of this inequity, if another prospective

attachee was willing to pay National Grid for attachment but the streetlight obstructs that attachment, National Grid could simply revoke the license for the streetlight forcing the community to remove it or pay National Grid to remove it. (Id.) In this circumstance, the prospective attachee should pay to have the pole replaced with a pole that could support all existing attachees as well as their attachment. (Id.) If the utility needs to replace a pole for maintenance reasons or because they needed to make changes to their distribution system to improve service, then all attachees should remove and reattach at their own expense. (Id.) If the change is required by any other party, the requesting party should reimburse others their reasonable expenses associated with the relocation of their facilities or any changes required to accommodate the request. (Id.)

6. Indemnification: It is not necessary or appropriate for the municipal customers to indemnify National Grid for any liabilities related to the ongoing operations of the lighting equipment after transfer (Tariff at Sheet 6; Agreement of Sale at page 7, §6). National Grid's proposed tariff and agreements make it very clear that National Grid transfers the lighting equipment "as is" and that the municipal customers are responsible for all operations and maintenance from that point forward. As one example, there is no good reason the Municipalities should have to indemnify National Grid for an accident caused by a failure of another attachee's attachment to National Grid's pole or the pole itself. As another, it makes no sense for the municipal customer to indemnify National Grid for any liabilities arising out of or related to National Grid's operation or maintenance of the lighting equipment before it is transferred to the municipalities. If the PUC believes that some form of indemnification is warranted, it should be limited to claims related to failures to meet applicable street light operating standards post closing (as provided by NYSEG's tariff) and limited to the extent of the municipality's existing insurance coverage.

In the absence of indemnification, the insurance requirements in section13 of the Licenses are not warranted. The Municipalities can and should assess their own need for insurance coverage.

II. Rate and Other Tariff Terms

i. Tariff Flexibility

A tariff for Customer-Owned streetlights should include an option where National Grid provides maintenance and a provision for metered streetlights. (Woodbury at page 7, line 11) A community should be able to enter into a contract with NGRID to provide streetlighting maintenance if both parties agree. (Id.) NGRID has a tariff in Massachusetts that provides for such limited services for customer owned assets. (Id.)

Metered streetlights are a reality in other parts of the country. (Id.) The Company already has a metered rate for streetlights that typically applies to downtown lights fed from a single power box. (Id.) What is needed now is to add to that rate (or to the S-5 rate) the ability of the customer to employ the smart photocell or controls on individual streetlights that are currently unmetered. (Id.) Today's photocell technology provides meter grade measurements of energy consumed along with virtually unlimited options for dimming or timed operations. (Id.) This technology would provide usage information directly to NGRID, essentially treating each lamp so equipped as an individually metered consumer. (Id.) From an operations and public safety standpoint, these new technologies are important and will become more so in the near future. (Id.) These control systems allow a variety of other options such as causing light to flash, which can assist emergency operations or brightening lights in case of an accident, or reported crime. (Id.) The adopted tariff should provide for the use of this important technology as contemplated by the Act. (Id.)

ii. Maintaining Inventory

The last sentence of the Inventory of Lights provision of the proposed tariff provides "If the Customer fails to meet the referenced reporting requirements or the identification of unreported lights

by the Company, the Company will have the right to terminate service under this tariff and require the Customer to obtain service under an applicable metered service." How can National Grid propose conversion to metered service for unmetered technology? If the municipal customer fails to report a change to a particular light or attachment, at most the penalty should be to re-bill the municipality for the unmetered flat-rate service for the period in question with reasonable interest.

iii. Wattage Billing

The company proposes grouping LED streetlights in 50 watt increments and billing each group at the mid point of that group. (Woodbury at page 10, line 10) So 0-50watt LED lamps would be billed at 25 watts. (Id.) While this may appear fair on the surface when examined in the detail of their streetlighting inventory it will result in overcharging the customers. (Id.) The most common streetlight in NGRID's service territory is the 3500 to 4000 lumen lamp (approximately59% taken from a 1998 NGRID depreciation study in Massachusetts-DTE 98-76). (Id.) Rhode Island's inventory reflects a similar distribution of lamp types and wattages. (Id.) The matching lumen replacement LED light for the 50w HPS lamp ranges in wattage from 14.61 to 24 watts depending on the manufacturer selected and it would be billed at 25 watts. (Id.) The second most common fixture is the 100watt HPS or its equivalent lumen fixture. (Id.) Together these two wattages account for 73% of National Grid's inventory. (Id.) The current correct LED to replace the 100 watt HPS fixture is a 53 watt LED which would be billed at 75 watts. (Id.) A review of the entire inventory reported in the National Grid depreciation study finds that if the correct lumen LED is selected based on matching the existing lumen outputs in their inventory it would result in an overcharge of over 20%. (Id.) As technology becomes more efficient, over charges will only be exacerbated. (Id.) LED lights that produce 2000 lumens have dropped from 27 watts two years ago to 17 watts today. (Id.)

National Grid has argued that billing based on actual wattages is too administratively difficult, yet this is the means by which most utilities bill for LED streetlights. (Id.)

iv. Operations and Maintenance Fees

The Municipalities do not understand the allocation of plant and costs that was used to derive National Grid's revenue requirement. (Id. at page 14, line 6) As an example, the company has assigned all of the 373 plant to the "Lighting (Lighting Equipment and O & M)" column. (Id.) However, we know that they will be selling these assets to the communities so the sale price should be reflected in a reduction of the balance in the 373 account. (Id.) Likewise if we look at FERC accounts 361-367, some portion of that equipment will also be transferred and paid for by the community, so we would expect those numbers to be proportionately reduced. (Id.) The same principle applies the cost of operation and maintenance. (Id.) The Municipalities request a detailed explanation of National Grid's logic in the allocation of plant and costs in Exhibit JAL-4. (Id.)

v. Controls

National Grid's proposed hours of operation schedule for the dimming and part-light schedules is based on an arbitrary value of just over five average hours of dimmed or de-powered streetlights per evening (1,874 annual burn hours) (Carrigg at page 4, line 2; see also Walter at page 5). The Company should allow greater flexibility for dimming and part night schedules; it will not cause an undo administrative burden or require a costly update to existing billing software. (Id.)

According to the testimony of John E. Walter, the dimming operating schedule proposes that the annual dusk to dawn figure of 4,175 burn hours be divided into 2,301 hours at full energy consumption and 1,874 hours at 70% energy consumption (Id. at line 15). This represents an energy reduction of 30% for 1,874 hours and an energy reduction of 13.4% compared to standard full power dusk to dawn operation. (Id.) National Grid proposes to calculate the kilowatt-hour consumption of

lights under the dimming operating schedule by simply reducing these 1,874 burn hours by 30% (multiplying 1,874 by 70%). (Id.) The testimony figures that 70% of 1,874 is approximately 1,314 hours. (Id.) 70% of 1,874 is in fact approximately 1,312 hours. (Id.) Furthermore, the figures used to calculate the proposed rate tariff provided in JAL-1 sheet 2, show that 1,314 hours was not used to obtain the Annual Billable kWh Delivered Operating Schedule for each light source under the dimming operating schedule. (Id.) 1,314 hours was used to calculate the figures for Incandescent, Mercury Vapor, Metal Halide, and High Pressure Sodium Lights. (Id. at page 5) 1,031 hours was used for Light Emitting Diodes (LEDs). (Id.) National Grid's testimony and proposed dimming operating schedule for all light sources except LEDs calculates 1,874 hours at 70% energy consumption. (Id.) This represents a 13.4% energy reduction overall. (Id.) The proposed dimming operating schedule for LEDs calculates 1,874 hours at 55% energy consumption (Id.). This represents an energy reduction of 45% during the dimming period, and a 20.2% energy reduction overall. (Id.) This inconsistency is detailed in Carrigg Figure 1.

If the Commission should find that one single regime for lighting controls meets the purposes of the Municipal Streetlight Investment Act, then a dimming rate of 50% of original energy should be applied; 1,874 hours at 50% energy consumption for a total of 937 burn hours during the annual dimming period. (Id. at line 13) This was the quantity the company originally proposed to the Office of Energy Resources. (Id.) At 50% energy levels, dimming will more effectively reduce both energy use and expenditures for municipalities during the evening dimming periods compared to 70% energy levels. (Id.) The 70% energy level figure is arbitrary. (Id.) The proposed Annual Billable kWh Delivered Operating Schedule (JAL-1, sheet 2) uses a 70% figure for some light sources and a 55% figure for others. (Id.) Mr. Walter testifies that, "the company observed that lighting levels can be reduced by as much as half when activity is significantly reduced." Therefore, a 50% energy level is

warranted for the dimming operating schedule for all light sources. (Id.) In accordance with the Company's general hours of operation for operating schedules, the 50% dimming operating schedule would be based upon 3,238 hours of operation annually as compared to the 4,175 hours annually for the Dusk-to-Dawn schedule and 3,615 hours of operation annually for the company's proposed 30% energy reduction Dimming operating schedule (Id. at page 7, line 3, Figure 3). (Id.)

Mr. Walter testifies that, "Additional research did not identify any municipality that has adopted large scale dimming applications." (Walter page 11, line 13) Large jurisdictions such as Surry, Southampton, and Suffolk UK have recently moved to a 50% dimming regime for residential roads (Id. at page 6, line 4, Figure 3). Surry is only dimming to 80% of original energy and lumens on streets designated as "main roads." (Id.) Dimming schedules for unmetered service allow for several "dimming events" throughout a night, either on a time switch or on photoelectric control units. (Id.) Having a similar option for Rhode Island where two separate levels of dimming are offered would allow energy use reductions on main roads, where 50% dimming may be deemed unsafe, while providing energy and cost savings of a 50% reduction on side streets and in residential areas. (Id.) National Grid's proposal to allow only one dimming schedule prohibits the municipalities from introducing a wide range of safety and energy and cost savings options offered by currently available control systems. (Id.)

We appreciate National Grid's position in response to Division 1-8, "If the Company determines that there is significant customer interest in expanded operating schedules for Company-owned street and area lighting, the Company may consider offering these options in a subsequent filing related to Company-owned facilities." The Municipalities are indeed interested in such options and ask the Company to offer them in this tariff.

v. Termination of Service

The issue of what happens if and when the municipality resolves that it no longer wants to own and operate its streetlights does not need to be addressed in this tariff. It is not contemplated in the Act, which requires the Municipalities to either purchase all or none of the streetlights (a provision specifically requested by National Grid). National Grid has reported that none of the 24 municipalities that have resolved to buy their streetlights in Massachusetts have subsequently resolved to sell them. (National Grid Reply to Commission 1-9(e)) The Municipalities will resolve this concern if and when they get to it. If the PUC deems it important to address this in the proposed tariff, any such transaction should be greatly simplified and much better balanced.

For these reasons, WCRPC and the League respectfully request an order requiring revisions to the proposed tariff, Purchase Agreement and Underground and Overhead License Agreements to ensure consistency with the purposes of the Act.

Respectfully submitted,

THE RHODE ISLAND LEAGUE OF CITIES AND TOWNS AND THE WASHINGTON COUNTY REGIONAL PLANNING COUNCIL

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CERTIFICATE OF SERVICE

I hereby certify that on October 31, 2013, I mailed this original pleading and 9 photocopies to the PUC and sent a true copy of the document by electronic mail to the parties, the Office of Energy Resources, National Grid, The Division of Public Utilities and Carriers Advocacy Section, the Rhode Island Office of the Attorney General and the Energy Efficiency Resources Management Council.

Seth H. Handy